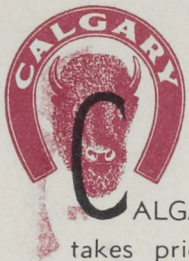


THE MIRACLE OF
WARTIME PRODUCTION IN
ALBERTA

1939
TO
1945





CALGARY BREWING & MALTING CO., LTD.
takes pride in presenting Alberta's outstanding contribution to the national war effort from 1939 to 1945. In publishing this book, the West's pioneer company pays tribute to the men and women of Agriculture and Industry who made our "Miracle of Production" possible. Sending a record number of sons and daughters to the battle-fronts of the world, they have persevered over labor and material shortages to prove, once again, that a steadfast and progressive people, blessed with a bountiful land, cannot be beaten by difficulties.

Indeed, Alberta's people are playing a great role in the chartered course to Victory. But, let us remember: one more enemy stands between us and peace. Let us, therefore, continue to create total victory in the fields . . . the factories and in the mines and forests — Working for War, and Preparing for Peace!

WORKING FOR WAR — PREPARING FOR PEACE

THE MIRACLE OF WARTIME PRODUCTION IN ALBERTA



BE PROUD YOU LIVE IN ALBERTA --- For on its peaceful farms... in the mines... the fields and in its factories an outstanding Production Battle is being fought and won! The factual, informative story of Alberta's outstanding contribution to the Nation's War effort and what Alberta people have accomplished is the theme of a series of features to be proudly presented in this paper by Calgary Brewing & Malting Co. Ltd., one of Alberta's Pioneers.

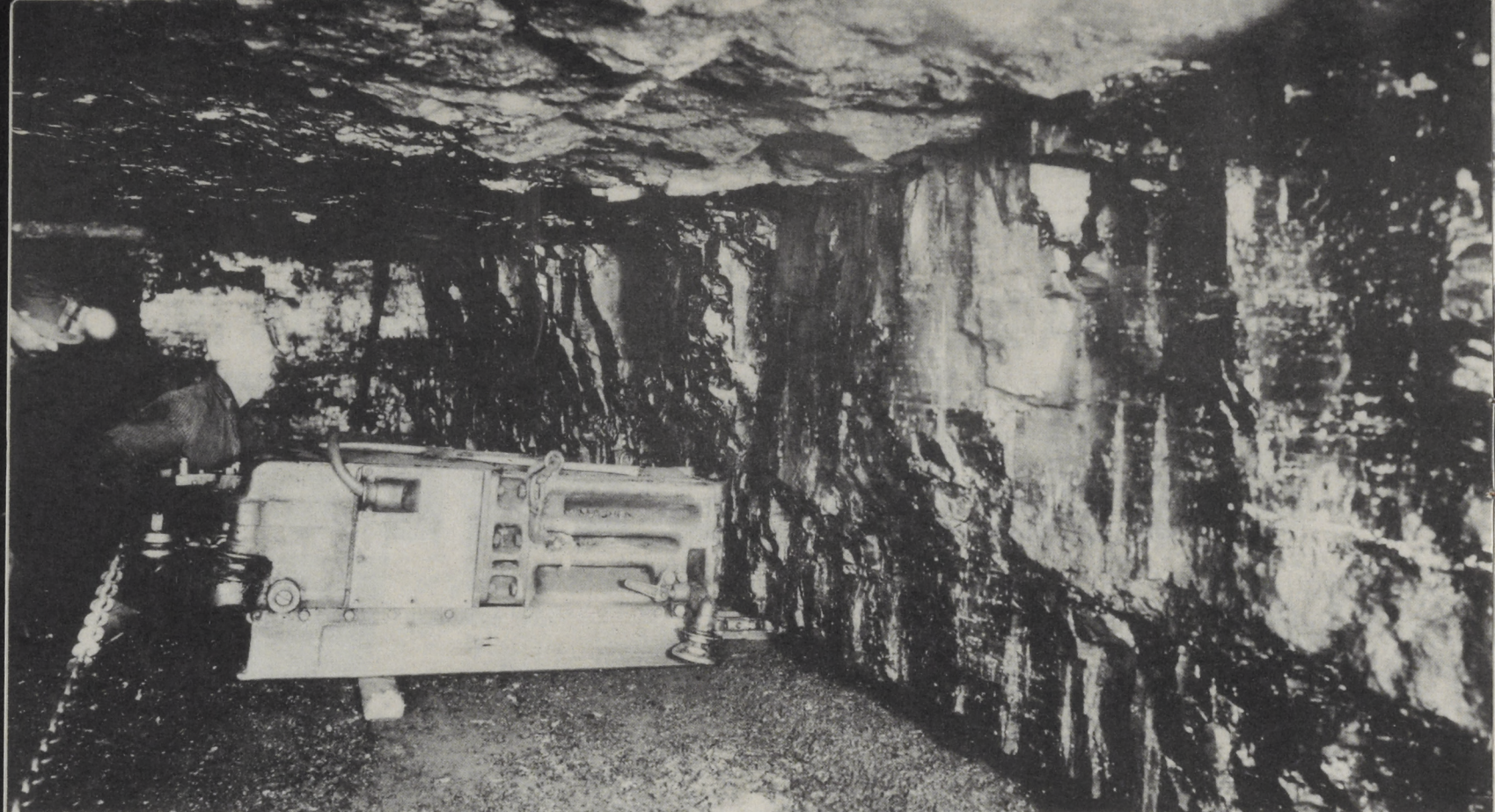


Photo by OLIVER STUDIO, Calgary, Alberta.

COAL

Supplies for Many Purposes

Photo by H. POLLARD Calgary, Alberta.



THE statement on the opposite page shows that Alberta has produced a large amount of coal since 1939.

Now, ponder for a moment over the following facts:

1. During the past fifty-seven years Alberta's total coal production totalled about 200,000,000 tons.

BUT

2. This represents about 0.43 percent of the estimated available reserves. About an equal amount has been lost through mining operations.
3. This means that only about one percent of Alberta's coal reserve has been utilized and lost to date.
4. Therefore, on the basis of present production the known available coal reserve in Alberta is **GOOD FOR ABOUT FOUR THOUSAND YEARS.**

FIVE groups of coal are available in Alberta. Some kinds can be shipped to distant markets. Others are better for local use. But Alberta's inexhaustible supplies of coal have caused some authorities to predict that, someday, Alberta will become the heart of industrial production within the British Commonwealth of Nations.

Alberta's coal may also be used for the manufacture of many kinds of chemicals.

The Government of Alberta maintains the Alberta Research Council, one of whose principal functions is to study Alberta's coal formations and develop new uses for coal. The Government also maintains a Mines' Branch which supervises mining operations to ensure that safety measures are observed, wastage of coal minimized, and that the mining industry is developed in an orderly manner.


WORKING FOR WAR — PREPARING FOR PEACE

THE MIRACLE OF WARTIME PRODUCTION IN ALBERTA

OVER 41 MILLION TONS OF

COAL

1939 TO 1945

 If the Coal mined in Alberta since 1939 was to be loaded in freight cars and assembled into one solid train, that train would contain approximately 913,900 cars and stretch over a distance nearly equal to the miles between Vancouver and Moscow. This amazing production achievement has been accomplished in spite of the acute labor and material shortages which the Industry has had to face during the war years. This record production of Forty-One Million Tons demonstrates, once again, the initiative and resourcefulness which has long been associated with Alberta and its people. It is with renewed hope and confidence that we can look to that postwar period when the progressive Coal Industry of this Province will again play a major rehabilitation role in developing the wide and varied by-products of coal from Alberta's vast resources.







STATISTICS COAL PRODUCTION 1939 to 1945

Year	Tons
1939	5,518,105
1940	6,205,088
1941	6,970,064
1942	7,754,279
1943	7,677,982
1944	7,000,000

The 1944 figure is a conservative estimate as full returns are not available at press time.

TOTAL PRODUCTION OF BY-PRODUCTS 1939 to 1945

Product	Tons
 COKE	413,940
 BRIQUETTES	878,836
 200 MINES	 8,500 MINERS

It is estimated that Alberta has 87% of Canada's Coal Reserves. Available reserves are quoted at over FORTY BILLION tons; Mineable Reserves, over TWENTY BILLION tons.



Picture by OLIVER STUDIO, Calgary, Alberta.

Hungry Cow Nearly Changed History

IF that cow had taken one more bite, the destiny of Alberta might have been vastly different.

David Fife, a farmer near Peterborough, Ontario, was striving to find a kind of wheat which would thrive in the Canadian climate; possess all the finest qualities of good wheat and yet ripen quickly to escape the late and early frosts of spring and autumn.

He obtained a special sample from a friend in Scotland. Only one single kernel survived and matured. All the others failed but the one kernel sent up five sturdy heads. One day a cow wandered into the garden and

ate two of the heads but Mrs. Fife ran to the rescue, chased the cow away and saved the three remaining heads.

The seeds from these heads provided a kind of wheat that withstood the Canadian climate. Crossed with another kind brought from India, it produced the famous Marquis wheat which became the standard for Western Canada, and which gave to the prairies the title — "Bread Basket of the World."

Alberta produces large quantities of other grains — oats, barley, rye — and flax growing is being encouraged especially for the manufacture of linseed oil. The Government of Alberta maintains a Field Crops Branch staffed with well-trained and experienced experts who assist farmers and advise them regarding methods to be followed in improving the quality and yield of their grain crops.



Photos Supplied
by
OLIVER STUDIO
Calgary, Alberta

WORKING FOR WAR — PREPARING FOR PEACE

THE MIRACLE OF WARTIME PRODUCTION IN ALBERTA

1,795,803,000 BUSHELS OF
GRAIN
1939 TO 1945



Nearly TWO BILLION bushels of grain ... this, in addition to substantial increases in other agricultural products, is another outstanding achievement credited to Alberta Farmers. In maintaining a steady level of grain production since 1939, our farmers have persevered, in the face of labor shortages and the restricted implement replacement supply, to accomplish yet another miracle in the Nation's contribution to victory. With this partnership of a progressive industrious people with Alberta's fertile soil and abundant growth-stimulating sunshine, we can well look to the future of agriculture with renewed faith and confidence . . . confidence in a postwar period when new improved methods and new efficiency with mechanized aids will open up new fields for expansion . . . new opportunities for our returning sons.



STATISTICS

YEAR	BUSHELS
1939.....	276,665,000
1940.....	319,958,000
1941.....	192,846,000
1942.....	430,025,000
1943.....	272,115,000
1944.....	304,194,000
Total Bushels.....	1,795,803,000

Total Wheat production during this same period is estimated at 802,900,000 Bushels. This yield is included in the above total.

NUMBER OF OCCUPIED FARMS..... 99,716

ESTIMATED FARM POPULATION...489,583

Gross value of 1943 agricultural production..... \$365,226,000

Average income per farm..... \$3,663

TOTAL FARM AREA IN ALBERTA

Agricultural area..... 100,000,000 acres

Cultivated area..... 20,000,000 acres

FLOUR MILL PRODUCTION

Total production for export and domestic use.....14,141,446 Barrels

Number of mills.....104



Photo by OLIVER STUDIO, Calgary, Alberta.

Alberta Enters New Era in Oil

OIL suitable for the manufacture of lubricants has been discovered recently in Alberta. Since 1914, Alberta has been producing oil suitable for fuel but it was not until 1944 that oil suitable for lubricating purposes was discovered. The development of these new fields is going forward rapidly.

Alberta's laws pertaining to oil production are such as to encourage development and expansion without waste, under a system of private enterprise which,

however, ensures that the people, through their Government, may benefit from the results without sharing any of the speculative risks always connected with oil well drilling.

The lands are held by the Crown (The Government) but are leased to private persons or companies who must undertake to develop them. If production is obtained, the producers must pay a royalty of one-eighth of production to the Government. The monies thus obtained from oil production go to relieve the tax burden on the people and to supply funds for many essential public services such as hospitals, nursing and other health services, schools and so forth.

The Government of Alberta maintains a Conservation Board whose principal function is to regulate the production of oil in such a way that the wastage of natural gas will be reduced to a minimum in the process.

Photo by H. POLLARD. Calgary. Alberta.



WORKING FOR WAR — PREPARING FOR PEACE

THE MIRACLE OF WARTIME PRODUCTION IN ALBERTA

54,514,109 BARRELS OF

OIL

1939 TO 1945

STATISTICS

The following production figures include returns from Turner Valley, Taber, Tilley, Wainwright, Vermilion, Lloydminster, Princess, Moose Dome, Del Bonita and Red Coulee fields.

Year	Barrels
1939	7,594,411
1940	8,493,237
1941	9,908,643
1942	10,143,270
1943	9,674,548
1944	8,700,000
Total	54,514,109

This figure represents an approximate total of nearly TWO BILLION gallons of crude oil production in 6 years.

To carry this production it would
take a total of 279,560 Tank Cars.

Producing Wells at Jan. 22 328
Daily production 23,573 Barrels

Most recent report on drilling operations shows 27 Wells are to be drilled this year. Out of this number only 17 will be drilled in the Turner Valley area.

ALBERTA has often been referred to as the "Double-Decked" Province . . . Enormous mineral wealth below and a blanket of fertile growth-stimulating soil above. Oil, the lifeblood of the vast motorized fleet that gathers and speeds vital supplies to the warfronts, is one of the greatest of Alberta's subterranean blessings. Since coming into production in 1914, the Turner Valley field alone has produced over 70 Million Barrels. At the present time, an average of 23,573 Barrels per day of this precious war requirement flows from 328 producing wells in all fields. This is a noticeable decrease from the peak production recorded in 1942, but with 27 new wells now drilling and surveys completed for 157 more to be drilled when materials and labor are available, we can be sure the Oil Industry will play an increasingly important post-war role in the economic life of this great Province.





Photo by McDERMID STUDIOS LTD., Edmonton, Alberta.

Little Chicken Coop Becomes a Mansion

EARLY farmers in Alberta sometimes "kept a few hens." The hens picked and scraped around the farm yard, laid eggs in the haymow or feed boxes in the stable. The farm housewife collected a few of them "to swap for gingham at the general store" or for household use.

Then the humble hen squawked her way right into a big business.

Today large "egg factories" three storeys high and often larger than a large barn, house thousands of high grade birds on hundreds of farms in Alberta.

Very spacious hatcheries hatch tens of thousands of chicks each spring, and the poultry industry has surged to a leading place in Alberta's economy.

An idea of its present position can be obtained from the statistics on the opposite page.

Under the direction of the Poultry Branch, the Department of Agriculture maintains a demonstration and breeding plant near Edmonton. From this plant, poultrymen obtain birds with which to improve their flocks. Hundreds of thousands of birds have been banded and blood tested. More than 4,000,000 chicks have been distributed under Government supervision. Regulations govern grading of eggs and dressing of poultry so that high standards are maintained. Demonstrations and field days together with other methods of education keep producers informed at all times regarding the latest and best methods to use in raising poultry and improving egg production.

Photo by OLIVER STUDIO, Calgary, Alberta.



WORKING FOR WAR — PREPARING FOR PEACE

THE MIRACLE OF WARTIME PRODUCTION IN ALBERTA

OVER 73 MILLION DOLLARS
IN

POULTRY

and 192,321,726 dozen eggs

1939 TO 1945



EGGS for our fighting forces! EGGS for Britain! EGGS for the meals of our home-front workers! This essential element of a healthy diet is being produced—and processed—in ever-increasing quantities by Alberta's growing poultry industry in response to urgent war demands. JUST IMAGINE! Nearly Forty Million Dozen eggs in 1944—over SEVENTY-FIVE dozen per minute, to mark up another record-breaking production figure for Alberta! At present market prices, this represents approximately **TEN MILLION DOLLARS** per year to poultrymen and farmers, *plus* an additional **EIGHT MILLION DOLLARS** in revenue from dressed poultry sales. A substantial percentage of Alberta's poultry products is processed right here in the Province for export to the Battlefronts and to our Allies. One Egg-powdering plant alone processes 300,000 eggs per day and employs an average of Sixty persons. Thus, poultry is not only making an important contribution to proper nutrition and health on many fronts, but is building a place for itself in the economic fabric of this Province.



STATISTICS

Yearly wartime market value

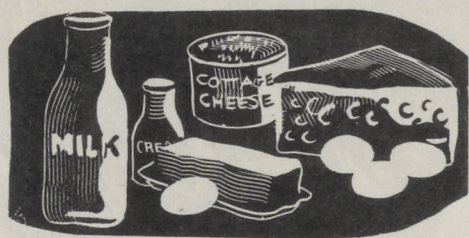
Year	Value
1939	\$ 6,000,000
1940	7,618,900
1941	9,279,900
1942	14,768,000
1943	17,333,600
1944	18,192,200
Total	\$73,192,600

1944 ALBERTA POULTRY POPULATION

Hens and Chickens	10,959,000
Turkeys	627,400
Geese and Ducks	232,000

WARTIME EGG PRODUCTION

Year	Dozen
1939	25,808,000
1940	26,108,560
1941	28,446,500
1942	34,613,000
1943	37,564,166
1944	39,781,500
Total	192,321,726 Doz.



High Food Values In Dairy Products

ALBERTA'S invigorating open air, her modernized educational facilities and her generally high standards of living are not alone responsible for the fact that this is an ideal province for children. Alberta produces large quantities of dairy products which, besides being always fresh, are easily obtained and extremely economical for the amount of body-building food values obtained from them.

The people of Alberta are keenly conscious of the tremendous benefits to be derived from proper nutrition and many communities have established local nutrition councils which function in co-operation with

the Nutrition Council established by the Department of Health.

Through local councils at Wabamun, Red Deer, Edson, Ponoka, Taber, Westlock, Drumheller, Medicine Hat, Lethbridge, Calgary and Edmonton and through Health Units in Clover Bar, Sturgeon, Two Hills, Holden, Lamont, Stettler, Red Deer, Didsbury and High River as well as through school boards in many other localities, the people are kept constantly informed about the latest advances made in science pertaining to nutrition. The press and radio both co-operate with lecturers and local meetings to publicize the importance of maintaining high nutritional standards.

In 1944 the distribution of vitamin preparations was centralized through the Department of Health, which acted as an agent for local organization and school boards. A total of more than 4,000,000 vitamin capsules was distributed during the first year of operation and the volume is increasing rapidly.

But, despite scientific aids to nutrition, dairy products play an essential part because they provide in a natural form so many vitamins and minerals so necessary to health.

Alberta's dairy farms may make a very substantial contribution to the nutritional needs of the devastated countries and may come to the aid of millions of war-stricken children during the reconstruction period.

Photo by OLIVER STUDIO, Calgary, Alberta.



ALBERTA COW BROKE WORLD'S RECORD IN BUTTERFAT PRODUCTION

An Alberta Holstein cow, owned by Hays Limited near Calgary, succeeded in breaking the World's record by producing 1406 pounds of butterfat in 365 days. This butterfat production represents approximately 1761 pounds of butter. A comparison of Alcartra Gerben's Butter production and that of the average cow is impressively illustrated by the pyramids of butter cartons in the photograph on the left.

WORKING FOR WAR — PREPARING FOR PEACE

THE MIRACLE OF WARTIME PRODUCTION IN ALBERTA

226,570,260 POUNDS OF
DAIRY PRODUCTS

BUTTER and CHEESE
1939 TO 1945



Alberta's dairy industry has gone to war too, and since 1939 it has responded to constantly increasing demands by almost doubling in value its production. This production effort has done much to maintain the vital supply stream of butter, cheese and dehydrated milk to our fighting fronts and our allies, while still providing an adequate—but necessarily limited—level of supply at home.

Part of this production victory must be credited to Alberta Farmers' forward-looking policy of building high-production herds of proved breeding. On Alberta farms are some of the finest herds in America. This augurs well, not only for the successful prosecution of the food production battle, but for a bright future for the dairy industry in Alberta.



STATISTICS

Yearly production of Butter and Cheese from 1939 to 1945

BUTTER	Year	CHEESE
29,749,958 Lbs. . . .	1939 . . .	2,196,157 Lbs.
29,796,520 Lbs. . . .	1940 . . .	2,705,853 Lbs.
35,316,143 Lbs. . . .	1941 . . .	3,140,978 Lbs.
36,985,909 Lbs. . . .	1942 . . .	3,908,545 Lbs.
38,656,940 Lbs. . . .	1943 . . .	2,563,257 Lbs.
38,000,000 Lbs. . . .	1944 . . .	3,550,000 Lbs.
208,505,470 Lbs.	Total	18,064,790 Lbs.

YEARLY MARKET VALUE

1939	18,069,733
1940	19,532,344
1941	27,376,772
1942	31,574,838
1943	31,181,500
1944	32,000,000
Total	159,735,187

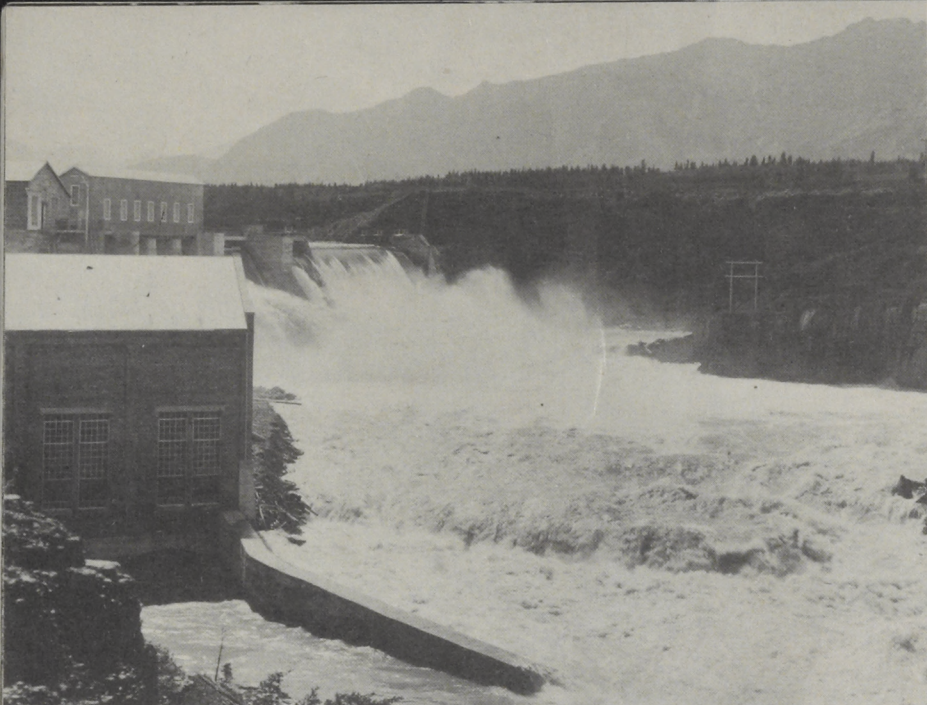
The 1944 figure is a conservative estimate as full returns were not yet available at press time.



93 creameries



18 cheese factories



KANANASKIS POWER PLANT

Photo by H. POLLARD, Calgary, Alberta.

Hydro-Power To Banish Drugery

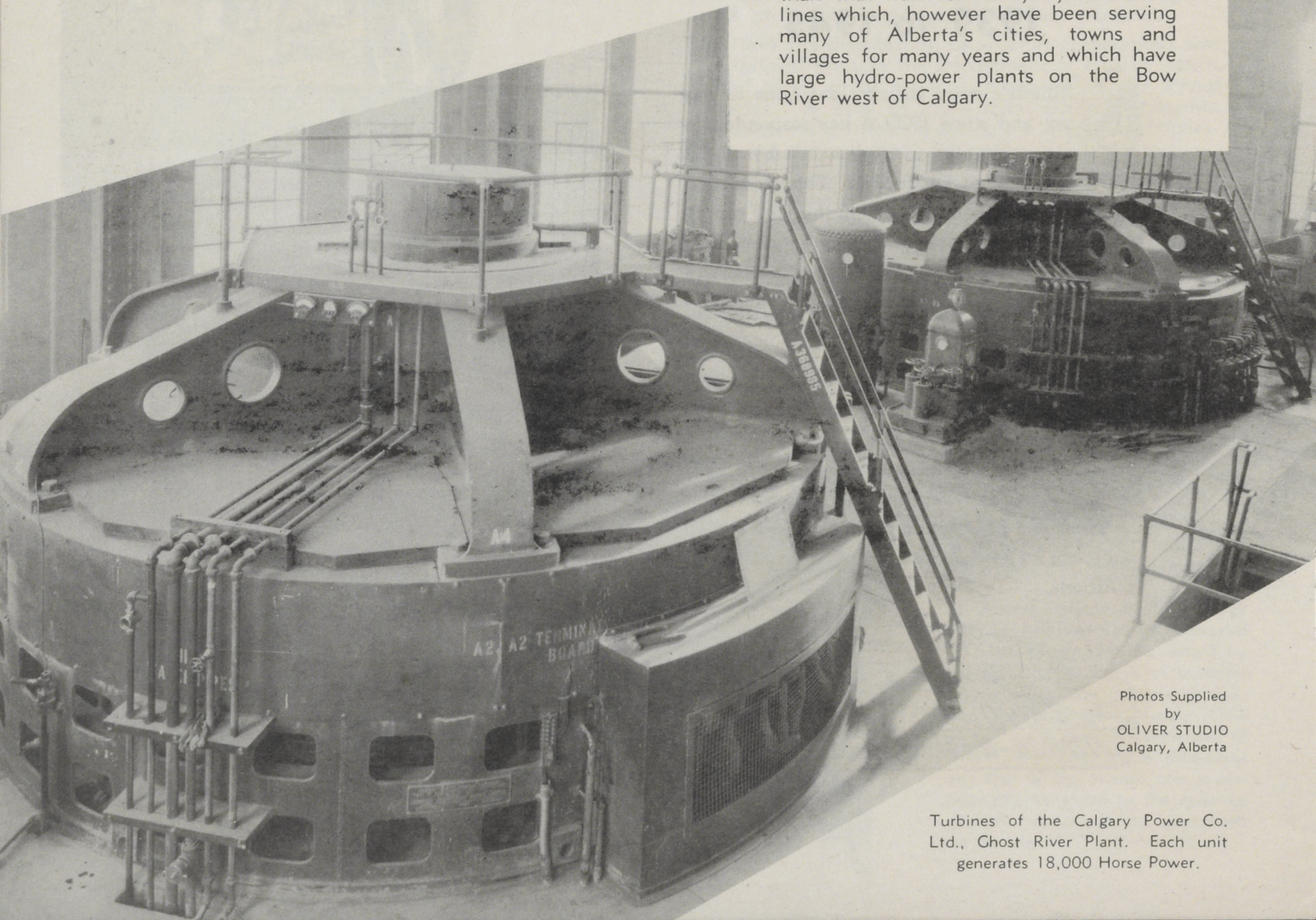
PLANS for the electrification of Alberta's rural district in the post-war era are under way. Construction of the necessary power lines and other facilities may provide employment for many returning veterans.

Action in this respect came when the Post-War Reconstruction Committee's interim report was tabled in the Legislature in March, 1944. It recommended the establishment of a Power Commission and this was achieved almost at once. During that summer, the upper reaches of the North Saskatchewan River which had never been surveyed were surveyed for the location of power sites and plans are under way for similar work on the Peace and Athabasca rivers.

Under the direction of Prof. Andrew Stewart of the University of Alberta, a study has been made of the possibilities for the electrification of Alberta's rural communities including villages and hamlets as well as farms and ranches.

Details in connection with rural electrification have been published in an illustrated booklet distributed by the Publicity and Travel Bureau of the Department of Trade and Industry, Edmonton.

The facilities which are being planned will expand to an area considerably larger than that now served by hydro-electric lines which, however have been serving many of Alberta's cities, towns and villages for many years and which have large hydro-power plants on the Bow River west of Calgary.



Photos Supplied
by
OLIVER STUDIO
Calgary, Alberta

Turbines of the Calgary Power Co.
Ltd., Ghost River Plant. Each unit
generates 18,000 Horse Power.

WORKING FOR WAR — PREPARING FOR PEACE



THE MIRACLE OF WARTIME PRODUCTION IN **ALBERTA**

OVER 2½ BILLION
Kilowatt Hours of Electrical
ENERGY
1939 TO 1945

STATISTICS

The following annual output is indicative of the rapid expansion of plant facilities to meet the wartime Industrial Emergency.

YEAR	KILOWATT HOURS
1939.....	251,806,555
1940.....	271,907,459
1941.....	319,743,000
1942.....	418,704,537
1943.....	580,666,006
1944.....	700,000,000
Total.....	2,542,827,557

POWER LINES

4,262 miles of Pole Lines



SERVING OVER
100,000
CUSTOMERS



The major power developed in Alberta is generated by FOUR Hydro and SIX Steam plants. These units Develop Approximately 171,000 H.P.



ELECTRIC POWER generated by the tumbling waters from the lofty Rockies and the coal-fed steam plants is the force that is shaping a new and different Industrial Empire for Alberta. Since its rapid development to meet the National emergency, the Utility has made some notable progress in planning for a postwar electrification of the whole Province. Already, with the limited supply of materials available, test projects for the purpose of securing valuable information on this ambitious reconstruction scheme are being conducted in three Alberta Communities. Thus, through intelligent planning, Power will be the key to open new fields of enterprise . . . bringing new opportunities and a better standard of living to more and more People in this progressive Province.





Photo by H. POLLARD. Calgary. Alberta.



LIVESTOCK - One of Alberta's Oldest and Most Important Industries.

Alberta Leads In Meat Packing

EDMONTON became Canada's leading meat packing centre in 1944.

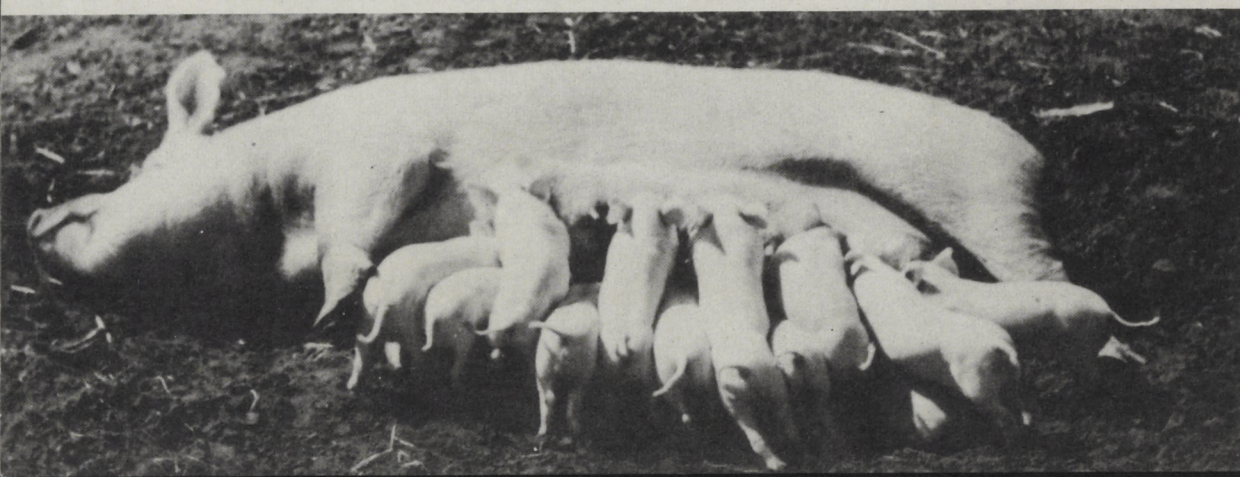
This outstanding achievement as a war effort was possible because Alberta's livestock producers, and particularly those who went in for hogs, did such a wonderful job in hastening to supply the demands for the British market.

The stage for this performance had been set during the preceding years. Under Government agriculture

improvement policies, in some of which the Dominion Government participated, Alberta's sire stock had been greatly improved.

Under the Provincial policy in six years 1,681 purebred bulls and 1,633 purebred boars had been distributed and under Federal-Provincial policies in four years 5,101 purebred sows and 231 purebred sheep had been distributed.

The Department of Agriculture maintains a health-of-animals service including a veterinary laboratory which provides a free diagnostic service for farmers and livestock producers. A staff of thirty expert district agriculturists is maintained to assist producers and it is hoped that the number will be increased after the war.



WORKING FOR WAR — PREPARING FOR PEACE

THE MIRACLE OF WARTIME PRODUCTION IN ALBERTA

10,000,000 HEAD OF
LIVESTOCK

CATTLE, SHEEP and SWINE
1939 TO 1945

STATISTICS

For comparative purposes there is shown in the table below, livestock figures for 1939 and 1944. These indicate the large increases that have taken place in livestock populations in Alberta during the war years.

CATTLE

1939 1,337,400 — 1944 1,742,800

SHEEP

1939 834,300 — 1944 1,023,200

SWINE

1939 993,200 — 1944 2,278,900

LIVESTOCK PRODUCTION

Year	Value
1939	\$ 93,701,000
1940	106,477,000
1941	127,396,000
1942	166,553,000
1943	184,560,400
1944	200,000,000

Total..... \$721,996,400

The 1944 figure is a conservative approximate estimate of another record-making year in Alberta's Livestock Production.



"FOOD WILL WIN THE WAR" This has been impressed upon us many times by the authorities who plan the all-out strategy to defeat our enemies. The magnificent part which Alberta Stockraisers have played in this vital war requirement, has perhaps, been better realized by the Enemy than the people of Alberta. In addition to this outstanding contribution to the Allied food pool, this record production has added greatly to the economic strength of this province. Additional millions of dollars flowing into the pockets of our producers means larger total incomes . . . a better margin of profit over expenses . . . making rural Alberta one of the best "class" markets in the world. Indeed, we can be proud and confident that Alberta will continue to play a leading role in feeding a liberated world, even after the guns are silent.





Narrows, MALIGNE LAKE, Jasper Park.

Photo by OLIVER STUDIO, Calgary, Alberta.

A Most Fortunate Province

Alberta is, indeed, a most fortunate province.

Its climate is comparatively mild in both summer and winter, and is suitable for the growing of virtually every food essential to man. More than 59,000 of its 255,000 square miles are covered with dense stands of forests to provide building materials for man's protection. Its tremendous coal reserves provide not only heat for domestic but for industrial purposes. Its mighty mountain ranges with their mighty perpetual glaciers ensure an ample supply of pure water for irrigation, the development of power and other uses. Untold supplies of natural gas and oil underlie extensive portions of the province. There is an ample supply of building stone, clays for pottery, salt and other natural resources such as the fabulous oil sands of the Athabasca River region.

Alberta's broad fertile plains are capable of growing large quantities of grains and vegetables either for food or for food products such as sugar and vegetable oils. Extensive tracts of Alberta's treeless prairies are suitable as pasturage for vast herds of cattle and flocks of sheep. Her parkland areas are especially adapted to mixed farming, dairying and poultry raising. Considerable quantities of fish from Alberta's

cold northern lakes are marketed regularly in places as far distant as Chicago and Boston. Furs from the northern forests are always in demand on the leading markets of the world.

Alberta is also fortunate because so much of her territory is still much as it was before the white men came. Here, deep within the age-old forests, by beautiful lakes and along the banks of clear, rushing streams and rivers, elk, moose, deer, caribou and mountain sheep and goats together with forest bird life exist as they did a thousand years ago and near the shores of thousands of northern lakes innumerable waterfowl make their summer homes and hatch their broods year after year.

Neither is Alberta devoid of inspiration-building grandeur. Her magnificently majestic mountains, the freedom of the open air, the carefree days of summer or winter pastimes among her peaks or in her verdant valleys have restored many a tired soul, rekindled many a forlorn hope and revived many lofty ambitions. Alberta, with all her material blessings, has also those cathedrals of stillness, built without hands, from which cultural and spiritual greatness grows.

Alberta is, indeed, a most fortunate Province.



THIS IS WORTH
Fighting For...



"Be Proud You Live in Alberta"

A thought by **CALGARY BREWING & MALTING CO. LTD.** makers of *Calgary Ginger Ale*